AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A pullulan-free edible film composition comprising:

(a) an effective amount of a film forming agent comprising a mixture of a maltodextrin, a filler, a hydrocolloid; and

(b) an effective amount of an antimicrobial agent ~~wherein the antimicrobial agent comprises~~ comprising cinnamaldehyde, such that the composition provides a cinnamaldehyde concentration of greater than about 15.0 micrograms per milliliter of saliva in the oral cavity of a user.

2. (Canceled)

3. (Previously presented) The composition of claim 1 wherein the edible film comprises about 5 wt. % to about 60 wt.% maltodextrin.

4. (Previously presented) The composition of claim 21 wherein the edible film comprises about 20 wt. % to about 40 wt.% maltodextrin.

5. (Previously presented) The composition of claim 21 wherein the edible film comprises about 10 wt. % to about 50 wt.% hydrocolloid.

6. (Previously presented) The composition of claim 1 wherein the edible film comprises about 20 wt. % to about 30 wt.% hydrocolloid.

7. (Previously presented) The composition of claim 1 wherein the edible film comprises about 5 wt. % to about 30 wt.% filler.

8. (Previously presented) The composition of claim 1 wherein the edible film comprises about 15 wt. % to about 25 wt.% filler.

9. (Previously presented) The composition of claim 1 wherein the hydrocolloid comprises a material selected from the group consisting of natural gums, biosynthetic gums, natural seaweeds, natural plant extrudates, natural fiber extracts, gelatins, biosynthetic process starchs, cellulosic materials, alginates, pectin, and combinations thereof.

10. (Previously presented) The composition of claim 1 wherein the hydrocolloid comprises a gum selected from the group consisting of natural seed gum, guar gum, locust gum, tara gum, gum arabic, ghatti gum, agar gum, and xanthan gum.

11. (Previously presented) The composition of claim 1 wherein the hydrocolloid comprises sodium alginate or calcium alginate.

12. (Previously presented) The composition of claim 1 wherein the hydrocolloid comprises a carrageenan.

13. (Previously presented) The composition of claim 1 wherein the filler comprises a food-grade bulk filler selected from the group consisting of microcrystalline cellulose, cellulose polymers, magnesium carbonate, calcium carbonate, ground limestone, silicates, clay, talc, titanium dioxide, calcium phosphates, and combinations thereof.

14. (Previously presented) The composition of claim 1 wherein the food-grade bulk filler comprises wood.

15. (Previously presented) The composition of claim 1 wherein the food-grade bulk filler comprises magnesium or aluminum silicate.

16. (Previously presented) The composition of claim 1 wherein the food-grade bulk filler comprises mono-calcium phosphate, di-calcium phosphate, or tri-calcium phosphate.

17. (Previously presented) The composition of claim 1 wherein the edible film comprises about 1 wt. % to about 25 wt.% cinnamaldehyde.

18. (Previously presented) The composition of claim 1 wherein the edible film comprises about 6 wt. % to about 25 wt.% cinnamaldehyde.

19. (Previously presented) The composition of claim 1 wherein the edible film comprises one of about 5 wt. %, about 8 wt.%, less than about 20 wt. %, and above about 21% cinnamaldehyde.

20. (Previously presented) The composition of claim 1 wherein the edible film comprises about 1 wt. % cinnamaldehyde.

21. (Original) The composition of claim 1 further comprising an effective amount of a medicament.

22. (Previously presented) The composition of claim 21 wherein the medicament comprises an oral cleansing or breath freshening compound selected from the group consisting of pH control agents, inorganic components for tartar or caries control, breath freshening agents, anti-plaque/anti-gingivitis agents, saliva stimulating agents, pharmaceutical agents, nutraceutical agents, vitamins, minerals, and combinations thereof.

23. (Previously presented) The composition of claim 21 wherein the medicament comprises urea.

24. (Previously presented) The composition of claim 21 wherein the medicament comprises phosphates or fluorides.

25. (Previously presented) The composition of claim 21 wherein the medicament comprises zinc gluconate.

26. (Previously presented) The composition of claim 21 wherein the medicament comprises cholorhexidene, CPC, or triclosan.

27. (Previously presented) The composition of claim 21 wherein the medicament comprises a food acid.

28. (Previously presented) The composition of claim 21 wherein the medicament comprises an acid selected from the group consisting of citric, lactic, maleic, succinic, ascorbic, adipic, fumaric, tartaric acids, and combinations thereof.

29. (Original) The composition of claim 1 further comprising an effective amount of a softening agent.

30. (Previously presented) The composition of claim 29 wherein the edible film comprises about 0 wt. % to about 20 wt.% softening agent.

31. (Previously presented) The composition of claim 29 wherein the edible film comprises about 2 wt. % to about 10 wt.% softening agent.

32. (Original) The composition of claim 29 wherein the softening agent comprises a plasticizer including a compound selected from the group consisting of sorbitol, glycerin, polyethylene glycol, propylene glycol, hydrogenated starch hydrolysates, corn syrup, and combinations thereof.

33. (Original) The composition of claim 1 further comprising an effective amount of a coloring agent.

34. (Original) The composition of claim 1 further comprising an effective amount of a flavoring agent.

35. (Previously presented) The composition of claim 34 wherein the edible film comprises about 0.1 wt. % to about 20 wt.% flavoring agent.

36. (Previously presented) The composition of claim 34 wherein the edible film comprises about 10 wt. % to about 15 wt.% flavoring agent.

37. (Original) The composition of claim 34 wherein the flavoring agent comprises a material selected from the group consisting of essential oils, synthetic flavors, fruit essences, anise, flavor oils with germ killing properties, and mixtures thereof.

38. (Previously presented) The composition of claim 34 wherein the flavoring agent comprises an oil selected from the group consisting of citrus oil, peppermint oil, spearmint oil, mint oil, clove oil, oil of wintergreen, and mixtures thereof.

39. (Previously presented) The composition of claim 34 wherein the flavoring agent comprises a compound selected from the group consisting of menthol, eucalyptol, thymol, and combinations thereof.

40. (Original) The composition of claim 1 further comprising an effective amount of an emulsifying agent.

41. (Previously presented) The composition of claim 40 wherein the emulsifying agent comprises an agent selected from the group consisting of lecithin, (C_{10}-C_{18}) fatty acids, mono and diacyl glycerides, ox bile extract, polyglycerol esters, polyethylene sorbitan esters, propylene glycol sorbitan monopalmitate, sorbitan monostearate, sorbitan tristearate, enzyme modified lecithin, hydroxylated lecithins, and combinations thereof.

42. (Currently amended) A method of oral cleansing by applying a pullulan-free edible film to the oral cavity, wherein the edible film comprises:

(a) an effective amount of a film forming agent comprising a mixture of a maltodextrin, a filler, a hydrocolloid; and

(b) an effective amount of an antimicrobial agent ~~wherein the antimicrobial agent comprises~~ comprising cinnamaldehyde, such that the composition provides a cinnamaldehyde concentration of greater than about 15.0 micrograms per milliliter of saliva in the oral cavity.

43. (Previously presented) The method of claim 42 wherein the edible film comprises at least about 1 wt. % cinnamaldehyde.

44. (Previously presented) The method of claim 42 wherein the edible film comprises about 6 wt. % to about 25 wt.% cinnamaldehyde.

45. (Previously presented) The method of claim 42 wherein the edible film comprises one of about 5 wt. %, about 8 wt.%, less than about 20 wt. %, and above about 21% cinnamaldehyde.

46. (Canceled)

47. (Previously presented) The method of claim 42 wherein the edible film comprises about 5 wt. % to about 60 wt.% maltodextrin.

48. (Previously presented) The method of claim 42 wherein the edible film comprises about 10 wt. % to about 50 wt.% hydrocolloid.

49. (Previously presented) The method of claim 42 wherein the edible film comprises about 5 wt. % to about 30 wt.% filler.

50. (Previously presented) The method of claim 42 wherein the hydrocolloid comprises a material selected from the group consisting of a natural gum, a biosynthetic gum, a natural seaweed, a natural plant extrudate, a natural fiber extract, a gelatin, a biosynthetic process starch, a cellulosic material, an alginate, pectin, and combinations thereof.

51. (Previously presented) The method of claim 42 wherein the hydrocolloid comprises a gum selected from the group consisting of natural seed gum, guar gum, locust gum, tara gum, gum arabic, ghatti gum, agar gum, and xanthan gum.

52. (Previously presented) The method of claim 42 wherein the hydrocolloid comprises sodium alginate or calcium alginate.

53. (Previously presented) The method of claim 42 wherein the hydrocolloid comprises a carrageenan.

54. (Previously presented) The method of claim 42 wherein the filler comprises a food-grade bulk filler selected from the group consisting of microcrystalline cellulose, a cellulose polymer, magnesium carbonate, calcium carbonate, ground limestone, a silicate, clay, talc, titanium dioxide, a calcium phosphate, and combinations thereof.

55. (Previously presented) The method of claim 42 wherein the filler comprises wood.

56. (Previously presented) The method of claim 42 wherein the filler comprises magnesium or aluminum silicate.

57. (Previously presented) The method of claim 42 wherein the filler comprises mono-calcium phosphate, di-calcium phosphate, or tri-calcium phosphate.

58. (Original) The method of claim 42 wherein the edible film further comprises one or more of a medicament, a softening agent, a coloring agent, a flavoring agent, and an emulsifying agent.

59. (Original) The method of claim 42 wherein the edible film delivers at least about 0.1 wt.% cinnamaldehyde to the oral cavity.

60. (Original) The method of claim 42 wherein the edible film delivers at least about 0.01 wt.% cinnamaldehyde to the oral cavity.

61. (Original) The method of claim 42 wherein the edible film delivers at least about 0.005 wt.% cinnamaldehyde to the oral cavity.

62. (Currently amended) A method of making a pullulan-free edible film comprising:

(a) forming an aqueous solution that includes a maltodextrin, a hydrocolloid, and a filler;

(b) adding an effective amount of an antimicrobial agent to the aqueous solution, ~~wherein the antimicrobial agent comprises~~ comprising cinnamaldehyde, such that the edible film provides a cinnamaldehyde concentration of greater than about 15.0 micrograms per milliliter of saliva in the oral cavity of a user; and

(c) drying the aqueous solution to form a dry edible film.

63. (Original) The method of claim 62 wherein adding an effective amount of an antimicrobial agent comprises adding sufficient cinnamaldehyde such that the dry edible film comprises at least about 1 wt.% cinnamaldehyde.

64. (Original) The method of claim 62 wherein adding an anti-microbial agent comprises adding sufficient cinnamaldehyde such that the dry edible film comprises about 1 wt.% to about 25 wt.% cinnamaldehyde.

65. (Previously presented) The method of claim 62 wherein forming an aqueous solution comprises adding sufficient maltodextrin such that the dry edible film comprises about 5 wt.% to about 60 wt.% maltodextrin.

66. (Original) The method of claim 62 wherein forming an aqueous solution comprises adding sufficient hydrocolloid such that the dry edible film comprises about 10 wt.% to about 50 wt.% hydrocolloid.

67. (Original) The method of claim 62 wherein forming an aqueous solution comprises adding sufficient filler such that the dry edible film comprises about 5 wt.% to about 30 wt.% filler.

68. (Original) The method of claim 62 wherein forming an aqueous solution further comprises adding one or more of a medicament, a softening agent, a coloring agent, a flavoring agent, and an emulsifying agent.

69. (Original) The method of claim 62 further comprising heating the aqueous solution to a temperature of about 40ºC to about 60ºC prior to drying the aqueous solution.

70. (Currently amended) A treatment method for reducing the number or activity of bacteria in the oral cavity comprising the steps of:

(a) providing a a pullulan-free edible film composition comprising a mixture of a maltodextrin, a filler, a hydrocolloid, and cinnamaldehyde in an amount sufficient to kill or deactivate oral bacteria, such that the composition provides a cinnamaldehyde concentration of greater than about 15.0 micrograms per milliliter of saliva in the oral cavity of a user; and

(b) causing a person in need of the treatment to consume the edible film composition whereby the bacteria in the oral cavity of the person is reduced or inactivated by the treatment.

71. (New) A pullulan-free edible film composition comprising:

(a) an effective amount of a film forming agent; and

(b) an effective amount of cinnamaldehyde for reducing bacterial concentrations of P. gingivalis and F. nucleatum in the oral cavity of a user, such that the composition provides a concentration of greater than about 15.0 micrograms per milliliter of saliva in the oral cavity of the user.

72. (New) The composition of claim 71 wherein the composition provides a minimum inhibitory concentration against P. gingivalis at a concentration of greater than about 15.6 micrograms per milliliter of saliva in the oral cavity of the user.

73. (New) The composition of claim 72 wherein the composition provides a minimum bactericidal concentration against P. gingivalis at a concentration of greater than about 31 micrograms per milliliter of saliva in the oral cavity of the user.

74. (New) The composition of claim 71 wherein the composition provides a minimum inhibitory concentration against F. nucleatum at a concentration of greater than about 15.6 micrograms per milliliter of saliva in the oral cavity of the user.

75. (New) The composition of claim 74 wherein the composition provides a minimum bactericidal concentration against F. nucleatum at a concentration of greater than about 31 micrograms per milliliter of saliva in the oral cavity of the user.